

# Notice of Allowability

Application No.

10/032,287

Examiner

Jeanne A. Di Grazio

Applicant(s)

TSUYUKI ET AL.

Art Unit

2871

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment of 21 September 2004.
2. ☒ The allowed claim(s) is/are 20,22,24,25,27,33,36,38-44,46 and 48-54.
3. ☒ The drawings filed on 21 December 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

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## DETAILED ACTION

### *Claims*

Claims 20, 22, 24-25, 27, 33, 36, 38-44, 46 and 48-54 are pending. Claims 1-19, 21, 23, 26, 28-32, 34-35, 37, 45 and 47 have been cancelled per Response of September 21, 2004.

### *Allowable Subject Matter*

Claims 20, 22, 24-25, 27, 33, 36, 38-44, 46 and 48-54 are allowed.

The following is an examiner's statement of reasons for allowance:

As to claims 20, 22, 24 and 46, relevant prior art of record did not disclose, alone or in combination, a substrate for a liquid crystal device comprising: a light reflecting film having a pattern that provides light directivity and light scattering and a plurality of convexities or concavities of a teardrop shape and in combination with Applicant's other recited elements.

The above limitations appear to result in a novel light reflecting film for a liquid crystal display device.

The closest combination is United States Patent 6,573,959 B1 (to Molsen) in view of United States patent 6,433,847 B1 (to Minoura) and further in view of Japanese Patent

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Application No. 10-020290 (to Hoshi Junichi et al.). While Junichi discloses a quadratic cone, the cone appears to lack the requisite curved structure of a tear drop having an apex and curved or bulbous end.

As to claims 25 and 27, relevant prior art of record did not disclose, alone or in combination, a method of manufacturing a substrate for a liquid crystal device comprising steps of: employing a mask to form at least one of a plurality of convexities and a plurality of concavities of a teardrop shape and in combination with Applicant's other recited elements.

The above limitations appear to result in a novel method of manufacturing a light reflecting film for a liquid crystal display device.

The closest combination is United States Patent 6,573,959 B1 (to Molsen) in view of United States patent 6,433,847 B1 (to Minoura) and further in view of Japanese Patent Application No. 10-020290 (to Hoshi Junichi et al.). While Junichi discloses a quadratic cone, the cone appears to lack the requisite curved structure of a tear drop having an apex and curved or bulbous end.

As to claims 33, 36, 38-44 and 48-54, they are dependent either directly or indirectly upon claims with allowable subject matter above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

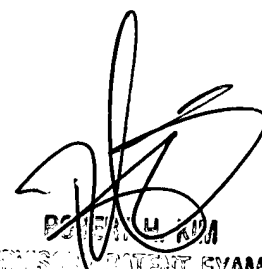
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeanne A. Di Grazio whose telephone number is (571)272-2289. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim, can be reached on (571)272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jeanne Andrea Di Grazio  
Patent Examiner  
Art Unit 2871

JDG



PATENT EXAMINER  
SUPERVISOR PATENT EXAMINER  
TECHNICAL CENTER 2800